



Egyptian Herbal Monograph

Volume 3

Medicinal Plants used in Egypt

Egyptian Drug Authority (EDA)

2023



Egyptian Herbal Monograph

Medicinal Plants Used in Egypt

Passiflora incarnata L.

زهر الآلام

1. Names & Synonyms (1)

Passiflora incarnata L.

Family: Passifloraceae (2-4).

Syns.: *Granadilla incarnata* Medik. (1, 2).

English name: Passionflower (3, 5), Passion vine, Apricot vine, Grenadille, Maypop, Passiflora (3, 6).

Arabic name: Zahr el-alam زهر الآلام (7).

2. Parts used for medicinal purpose

Herb / dried aerial parts (2, 3, 5, 6, 8).

3. Major chemical constituents

- **Flavonoids:** as C-glycosides of apigenin (e.g. vitexin, isovitexin, schaftoside, isoschaftoside) and of luteolin (e.g. orientin, iso-orientin) (3) and their aglycones (apigenin, chrysin (9), luteolin, quercetin, kaempferol) (6, 10, 11).
- **Others:** indole alkaloids (as harmane, harmine and harmaline), cyanogenic glycosides, volatile oil, maltol (6, 10, 11), amino acids, fatty acids (e.g. linoleic, linolenic, myristic, palmitic, oleic acids), formic and butyric acids, sterols (e.g. stigmasterol, sitosterol) and sugars (e.g. raffinose, sucrose, glucose, fructose) (3).

4. Medicinal Uses (Indications)

- A. Relief of mild symptoms of mental stress, to aid sleep (insomnia) (5, 6) and as a mild sedative for nervous restlessness and anxiety (2, 12).
- B. As a calming agent for hemorrhoids, burns, and inflammation (6, 13).

5. Herbal preparations correlated to medicinal use

1. Comminuted herbal substance in boiling water as an herbal infusion (5)
2. Powdered herbal substance (5).
3. Liquid extract (5)
 - 3.1 Ethanol 25% V/V
 - 3.1.1 Ethanol 25% V/V (DER 1:8)
 - 3.1.2 Ethanol 25% V/V (DER 1:1) (15)



3.2 Ethanol 45% V/V

3.3 Ethanol 60% V/V

3.4 Ethanol 70% V/V

3.5 Ethanol (96% V/V) + glycerol (85% m/m) + Water (11.8 + 1 + 7.9)

4. Dried extracts (5)

Corresponding to the tea and liquid extracts above.

5. Tincture

5.1 Ethanol 25% (1:8) (4).

5.2 Ethanol 45% (1:8) (15).

Herbal preparations (2-5) are in a pharmaceutical dosage forms. The pharmaceutical form should be described by the pharmacopoeia full standard term.

6. Posology and method of administration correlated to medicinal use

Adolescents, adults and elderly

Preparation 1

Indication A: Orally

1-2.5 g in 150 ml of boiling water as an herbal tea, 1-4 times daily (2, 5).

Indication B: Topically

20 g simmered in 200 ml water, strained and cooled before application (13).

Preparation 2

Indication A: Orally

0.5 - 2g, 1-4 times daily (2, 3, 5).

Preparation 3 (5)

Indication A: Orally

3.1.1 2 - 4 ml, up to 4 times daily

3.1.2 0.5 - 2 ml, up to 4 times daily

3.2 2 ml, up to 3 times daily

3.3 1 ml, 3-5 times daily

3.4 2 ml, up to 3 times daily

3.5 Adults: 0.3-0.4 ml, 3-5 times daily

Adolescents: 0.3-0.4 ml 3 times daily



Preparation 4 (5)

Doses of dried extracts corresponding to the posologies of tea and liquid extracts above.

Preparation 5

Indication A: Orally

5.1: 2-4 ml, up to 4 times daily (2-4).

5.2: 0.5-2.0 ml, 3 times daily (6).

Duration of use (5)

If the symptoms persist longer than 2 weeks during the use of the medicinal product, a doctor or pharmacist should be consulted.

Method of administration (5): Oral and topical use.

7. Contraindications

Hypersensitivity to active substances and to other plants of the same family (5).

8. Special warnings and precautions for use (5)

- If the symptoms worsen during the use of the medicinal product, a doctor or pharmacist should be consulted.
- The use in children under 12 years of age is not recommended.
- The use at dosages higher than those recommended and/or for longer periods should be avoided (3).

9. Interactions with other medicinal products and other forms of interaction

- None reported (5). However, potential interactions with other medicines with similar or opposing effects and used concurrently should be considered (3) such as benzodiazepines (additive effects at high doses), barbiturates (additive CNS effects) and anticoagulants (increased risk of bleeding) (4, 13).
- Passionflower may lower blood pressure, caution is advised when using with antihypertensive medications (13).

10. Fertility, pregnancy and lactation (5, 15)

- Safety during pregnancy and lactation has not been established. In the absence of sufficient data, the use during pregnancy and lactation is not recommended.
- No fertility data available.



11. Effects on ability to drive and use machines (5)

May impair ability to drive and use machines. Affected patients should not drive or operate machinery.

12. Undesirable effects (5)

- None known.
- If adverse reactions occur, a doctor or a pharmacist should be consulted.

13. Overdose (5)

No case of overdose has been reported. However, it is possible that overdoses may cause sedation to a greater extent than intended (3), drowsiness (4) and potentiation of MAOI therapy (15) are also possible.

14. Relevant biological activities (5)

Not required as per Egyptian guidelines for registration of herbal medicines.

15. Additional data

-

16. Date of last revision

10/05/2023.

References

1	www.powo.science.kew.org
2	WHO monographs on selected medicinal plants (2007). Monographs on selected medicinal plants, 3 , 257-267.
3	Barnes, J., Anderson, L. A. and Phillipson, J. D. (2007). Herbal Medicines, 3 rd edition. Published by the Pharmaceutical Press. ISBN 978 0 85369 623 0.
4	Spiteri, M. (2011). Herbal monographs including herbal medicinal products and food supplements. Department of Pharmacy, University of Malta. Set and printed by Print Right Ltd, Qormi.
5	European Union Herbal Monograph on <i>Passiflora incarnata</i> L., Hrotherba (2014). EMA/HMPC/715092/2013. Committee on Herbal Medicinal Products (HMPC).
6	Skidmore-Roth, L. (2010). Mosby's Handbook of Herbs & Natural Supplements. 4 th ed. ISBN 9780323057417.
7	Bedevian, A. K. (1936). Illustrated Polyglottic Dictionary of Plant Names. Argus and Papazian Presses.
8	Braun, L. and Cohen, M. (2010). Herbs and Natural Supplements - An Evidence-Based Guide. 3 rd edition, Churchill Livingstone. ISBN: 978 0 7295 3910 4.
9	Seetharaman, P., Gnanasekar, S., Chandrasekaran, R., Chandrakasan, G., Kadarkarai, M. and Sivaperumal, S. (2017). Isolation and characterization of anticancer flavone chrysin (5,7-dihydroxy flavone)-producing endophytic fungi from <i>Passiflora incarnata</i> L. leaves. <i>Annals of Microbiology</i> , 67 (4), 321- 331.
10	PDR for herbal medicines (2002). Montvale, NJ: Medical Economics Company, 2 nd ed., ISBN 1-56363-361-2.
11	Smruthi, R., Divya, M., Archana, K. and Ravi, M. (2021). The active compounds of <i>Passiflora</i> spp and their potential medicinal uses from both <i>in vitro</i> and <i>in vivo</i> evidences. <i>J. Adv. Biomed. & Pharm. Sci.</i> 4 , 45-55.
12	Natural Health Product, <i>Passiflora incarnata</i> (L.) (2018). Health Canada, https://webprod.hc-sc.gc.ca/nhp/id/bdipsn/atReq.do?atid=passionflower.passiflore&lang=eng
13	Passionflower (2014). In: Natural Medicines [database on the Internet]. Somerville (MA): Therapeutic Research Center. https://naturalmedicines.therapeuticresearch.com
14	Williams, L. and Wilkins (2004). Professional's Handbook of Complementary and Alternative Medicines, 3 rd edition. ISBN13: 978-1-58255-243-9. ISBN10: 1-58255-243-6 ISSN 1522-0877.
15	Duke, J. A. (2002). Handbook of Medicinal Herbs. 2 nd ed. CRC Press. ISBN 978084931284.